

ABSTRACT OF THE DISCLOSURE:

- 5 A Mach-Zehnder device including an input port, an output port, a substantially achromatic first coupling region optically connected to the input port and a substantially achromatic second coupling region optically connected to the output port. An intermediate region is optically connected to the first and second coupling regions. The intermediate region includes a first intermediate branch and a second intermediate branch.
- 10 The first intermediate branch defines a phase shifting portion. The phase shifting portion, in turn, defines a phase shifting portion level of birefringence over the length of the phase shifting portion. The phase shifting portion level of birefringence is different that the level of birefringence prevailing over the remainder of the first intermediate branch. The birefringence differential between the phase shifting portion level of birefringence and the
- 15 level of birefringence prevailing over the remainder of the first intermediate branch creates a polarization selective phase shift enabling the generally wavelength insensitive device to be used either as a coupler or splitter.